

VI. *Part of a Letter from Mr. Thomas Robie, Physician in New-England, to the Reverend Mr. Derham, F. R. S. Concerning the Effects of Inoculation; The Eclipse of the Sun in November 1722; And the Venom of Spiders.*

*Salem, Tuesday June 4.
1723.*

WE don't as yet see any ill Effects of Inoculation, but the Inoculated are as yet as well, and some of them a great deal better than ever; as for the ill Consequences that have been in *England*, I can't tell what they may arise from, but I can hardly think they are the genuine Effects of Inoculation, but may arise from some previous Disposition to such Distempers as you mention, or for want of due Evacuations after Inoculation, and too soon healing the Places of Incision; but I dare not pretend to say any more, and so leave it to the Opinion of better Judges; but only assure you I don't know, as yet of any such ill Effects in this Country.

As to the great Eclipse of the Sun in *November* last, I will give you my Observations thereof, when I have told you, that at *Yale* College, in *Connecticut* Colony, I have an Account that their Observers supposed it to be but about 8 Digits, when by my Calculation for *Cambridge*, it was to have been above 11. *Yale* College lies about 8' or 10' West from *Camb.* in Lat. about 41° North. I never calculated it for that place, but I did for *London*, and it agrees to about

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7' or

7' or 8' with your Observations, and pretty exact as ~~to the Digits.~~ The Gentleman that writes me word of this, tells me he calculated it and could make it scarce 7 *dig.* eclipsed, and that it passed off from *America* into the Sea, a great deal more southward than I made it, for by my Calculation it was to be central at *Cape Cod*, and so to pass over to the Isles of *Cape de Verd.* But taking him to be very much mistaken, I proceed to give you my Observations, as far as I was able to make them; and I think they were well and truly made.

	ft.	b.	l	
Nov. 27. 1722. I	7	27		morn. I saw the Sun rise Eclipsed, on its supreme Vertex to the South, about 4 <i>Dig.</i> tho' some on the Top of the new College saw it 2' or 3' before. The Sun's true rising this Morn. was 7 <i>b.</i> 30', hence the Refraction is about 6' and so I have often observed it. From this time, till about 8 <i>b.</i> 30' or 40' I saw no more of the Sun, but then I judge it was eclips'd 6 <i>dig.</i> or more.
d. b.	7	11		
2	8	55	15	The Sun was eclipsed 4 $\frac{1}{4}$ <i>Dig.</i> nearest.
3	9	00	16	4 <i>Dig.</i> $\frac{1}{2}$.
4	9	19	45	A little Spot in the Sun emerged.
5	9	25	45	I saw the Moon go off the Sun.
	9	25	45	Mr. <i>Danforth</i> in a Room just by me saw the Shadow

(69)

go off the Paper about 30°
from its lower Vertex to
the East.

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Mr. *Appleton* saw the
Shadow go off the Paper
fix'd to the College Brass
Quadrant at his House.

Mr. *Owen Harris*, an in-
genious Schoolmaster in
Boston, says he observed
the End at about $26' p. 9.$

By the second Observation the Sun's Diameter was
to the Moon's As 1000 to 972 ; by the third, As
1000 to 975. At *Boston* the Eclipse was observed,
allowing for its Distance, as I observed it at the Col-
lege. And at *Barnstable*, on *Cape Cod*, there was
but a little left of the Sun, and nearer the Head of
the Cape there was a Ring of Light quite round the
Moon.

The Telescope I made my Observations by is 24
Feet long. The Telescope that Mr. *Danforth* used,
thro' which the Rays were transmitted, was 8 Feet,
and the Brass Quadrant the very same Dr. *Halley*
used at *St. Helena*. If I have been guilty of any Mi-
stake pardon me, and if, with ease, you could tell
me where the Shadow would pass off *America*, I
should be glad, for I made it to be about *Cape Cod*.
Taking its Latitude to be 40° North, or $40^{\circ} 10'$ and
East from the College $10'$ or $15'$ I forget which.

I shall now give you an Account of a remarkable
Accident relating to the Venom of Spiders. *Sept. 13.*
1722 one *Nat. Ware* of *Needham* was bit by a
small Spider, which he could not give an exact De-
scription of, crushing it to Pieces between his Stock-
ing

ing and Leg; the Account he gave is this; *viz.* That getting up early in the Morning, and putting on his Stocking he presently felt something bite his left Leg a little above his Ankle, about $\frac{1}{2}$ an Hour after he felt a Pain in that Leg, and about $\frac{1}{2}$ an hour from his first perceiving Pain in his Leg, he felt a Pain in his Groin, and at the same Time a creeping Pain in the Calf of his left Leg; and about one Hour after it got into the Small of his Back, and then round him, and in his Stomach, and in his right Thigh, and afterwards Numbness in his Head; the Pains were not constant and fixed, but erratick and very acute. His Pulse was very low and heavy. He came to *Camb.* to a Physician there, and I was also desired to go and see him, which I did, and he gave me this Account.

Sept. 14. In the Morning the Man abovesaid came to see me, and was much better tho' he had but little Sleep in the Night. The Means the Doctor used were only *Sp. Car. Cerv. & Sal Vol. Corn. Cerv.* with *Vinum Viperin.* and Onions or Garlick externally applied to the Place where the Wound was. These things raised his Pulse, and so, I suppose, assisted Nature to throw off the Venom.